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VII.—*Geographical Notes on Siam, with a New Map of the Lower Part of the Menam River.* By HARRY PARKES, Esq., F.R.G.S., Her Britannic Majesty's Consul at Amoy.

Read, December 10, 1855.

THE treaty with Siam, lately concluded by Sir John Bowring, has brought that country into prominent notice, and added greatly to the interest that had been awakened by the remarkably liberal and enlightened characters of its two present sovereigns, and certain of their principal ministers. The opposite policy of jealous exclusiveness which had been pursued prior to the accession of the present sovereigns in 1851, had restricted foreign communication and prevented the expansion of European commerce, for which ample elements exist. Now, however, that the whole country has been freely thrown open to the enterprise of our merchants, it becomes deserving of our best attention; while its geography, which, in common with all the Hindu-Chinese, or ultra-Gangetic nations, remains very imperfectly known, requires special investigation.

The first important endeavour, made on our part, to improve or open up commercial relations with Siam, was confided to that veteran Orientalist and political agent, Mr. John Crawford, who proceeded there on a mission in 1822, and succeeded amid great difficulties in laying a foundation for friendly intercourse, and in acquiring such a knowledge of the genius and manners of the nation, and the resources of the country, as tended greatly to facilitate subsequent negotiations. Captain (afterwards Colonel) Henry Burney followed in 1826, and concluded the treaty upon which our political and commercial relations with Siam have hitherto been based. The arrival of Roman Catholic missionaries in the country, has been traced up to the time of St. Francis Xavier,* but no modern work has proceeded from their pen until last year, when Monseigneur Pallegoix, the present vicar-apostolic, on the occasion of his return to France, published a description of Siam, giving the results of his experience acquired during a residence of 24 years in the country, which must be regarded at the present moment as valuable and opportune. Several English merchants and American Protestant missionaries have also lived in Siam for the same length of time; but either from fear of a jealous government, or other motives, we have, with the exception of a description of the transitory visit of Malcolm, no published record of their observations and researches. That they have been industrious explorers, however, I had an opportunity of learning

* M. Beryth, principal vicar apostolic, arrived at Yuthia with six missionaries in 1662.

Sketch of
THE MENAM & OTHER SIAMESE RIVERS
from the Surveys & Observations of the
American Missionaries,
Communicated by
MF Consul Parkes
1855.

English Miles.

10 20 30

100° 30' 101°

14° 30' 14°

13° 30' 13°

GULF OF SIAM

100° 30' 101°

during my recent visit to Siam with Sir John Bowring; and indeed the principal object of this brief paper is to bring under the notice of the Society the contributions which they have made to the geography of Siam, as they are embodied in the map now submitted, and which represents the lower portion of the Menam and other Siamese rivers. Considering, however, how few of us are familiar with the extent, or the different states of which this kingdom is composed, I trust I may be allowed to preface the subject by glancing, in the first place, at the principal civil divisions of Siam.

The Siamese dominions may be said to extend from the 5th to the 21st degree of north latitude, or to upwards of sixteen degrees, and from the 98th to the 105th degree of east longitude, or about seven degrees. Of the longitude we may speak with more certainty than the latitude, for we still remain without the means of defining the northern boundary of Siam with any certainty. Most probably Siam Proper reaches to the 18th degree of north latitude, whilst its principal tributary, the Laos kingdom of Changmai, extends northwards as far as the 21st degree. These positions indeed have been adopted in the original MS. map constructed recently by the Prince Krom Hluang Wongsā, an uncle of the present King, and one of the highest and most distinguished state functionaries. He constructed it last year when employed on the frontier as Commander-in-Chief of the Siamese army, then engaged in a war with Chiangtoong, a tributary Birman state; and we may certainly acquit him of being disposed to disparage his own country, by making it appear smaller than it really is. Bishop Pallegoix, however, defines Siam as extending from the 4th to the 22nd degrees of north latitude, or two degrees in excess both of the above calculation and the careful estimate by Crawford. The kingdom of Siam comprises—

1. Siam Proper, occupying the centre.
2. Tributary Malayan States, on the south.
3. Conquered territory of Camboja and Korat, on the east.
4. Tributary Lao States, on the north and north-east.

Siam Proper is divided into 41 provinces, each of them governed by a *phyā* or mandarin of the first class, who is the King's viceroy, and is assisted in the administration by two deputies.

2. The Malayan States are Patani, Tringanu, Kalántan, and Quedah. The tribute or acknowledgment of fealty paid by these states, especially in the case of the last three, viz. Tringanu, Kalántan, and Quedah, the populations of which consist for the most part of Malays, is little else than the triennial presentation at Bangkok of a gold and silver flower, and, in effect, is often as nominal as the same mark of dependence observed on the part of Siam itself towards China. They are indeed bound to contribute

men, money, and provisions, when Siam is at war, but it appears that they seldom keep this engagement, unless Siam is in a condition to enforce it. In the case of Patani the subjection is more complete, on account of its population being, to a large extent, Siamese.

Camboja, now nearly divided between Siam and Cochin China, was, three or four centuries ago, more powerful than either of them, and at one time had the rule of many of the Lao States, and even of Siam itself. Attacked and harassed by the Anamese, that is, the Cochin Chinese and Tonquinese united, on one hand, and the Siamese on the other, large portions of its dominions have, from time to time, been seized and appropriated by these States, until but a small remnant of about two degrees of longitude and three or four of latitude, with a single seaport, Kampot, and perhaps half a million of subjects, are all that remain to the present impoverished monarch. The son of the Cambodian King is kept by the Siamese as a hostage at Bangkok, for the friendly conduct of his father; while the Cochin Chinese possess even a more material pledge in the exclusive navigation of the great river Mekon, which they have closed against the Cambojans.

Korat, previous to the Cambodian annexation, was the frontier state of Siam to the east, and considered, therefore, a highly important post. The Prince who rules it has the seat of his government in a strongly walled town, which can only be approached by a dense and dangerous jungle, known among the natives by the name of Dong Phya Fai (the forest of the king of fire). The journey from Bangkok to this place has lately been performed by Dr. S. R. House, an enterprising American missionary, long resident in Siam.

The Lao States present a most interesting people to our consideration, whether viewed in regard to their honest character and primitive manners, or as being the parent stock of the Siamese nation, and it has been even said of the Anamese also. I cannot say whether the designation "Lao," by which they are known among the Chinese, and which, in the language of the latter, signifies "ancient," or "the ancients," was given to them in allusion to their supposed antiquity. By the Burmese they are called Shans, but by themselves Tai, or Tai Yai, the elder Tai, in contradistinction to Tai Noi, the lesser, or the younger Tai, by which the Siamese have, until very lately, been commonly known, though they now endeavour to reject this designation. The fact, however, is sufficiently proved both by language and reliable historical documents. The philological studies of the American missionaries show, that while the Burman and Peguan languages are entirely diverse, except in the form of their alphabetic characters—the Siamese and the Laos, on the other hand, are substantially the

same, except in their written letters. The Laos have evidently borrowed their letters from their neighbours in Burmah, and the Siamese alphabet is as evidently a modification, or perhaps a simplification, of the religious character of Kamboja. As a distinct language the Siamese could not have existed for more than four or five centuries at the utmost, and it would thus appear that when the Siamese first separated from their northern progenitors, the Laos, they became a tributary province of Kamboja, and long continued to be governed, to a greater or less extent, by Kambojan officers. This circumstance will account for the fact of the court language being so largely imbued with Kambojan terms, and their sacred books, to this day, being wholly written in the Kambojan character.

In immediate connexion with Siam, it will be sufficient to notice two of the Laos tribes, severally named by the Siamese Lao Pungkao and Lao Pungdum, or White-bellied and Black-bellied Laos. The practice of tattooing, which is not observed by the former, but is universal among the latter, who cover their bodies with figures of tigers, dragons, and every description of beast or monster, is the cause of their being thus designated. The Black-bellied Laos comprise the states of Chiangmai, Laphun, Lakhon, Muang Phe, and Muang Nan; of which the first, Chiangmai, is the chief, and appears to maintain some sort of rule or jurisdiction over the others. Bishop Pallegoix describes the principal city as being surrounded by double ditches and double walls, enclosing a space of 1000 fathoms by 900, and having a population, including the suburbs, of 50,000 souls. The Menam runs at the foot of the walls, and the distance from Chiangmai to Bangkok, following that river's course, can be performed in fifteen days, though, according to the Siamese habit of travelling, a month is more generally occupied on the journey.

The White-bellied Laos, dependent on Siam, are in the state of Muang Lom, in about lat. 17° , at the head of one of the tributaries of the Menam, and in Luang Prabang, about a degree to the N.E., on the bank of the great Mekong. The former is unimportant in point of extent or population, but the latter is of considerable consequence in both these respects. Bishop Pallegoix assigns to its capital the large population of 80,000 souls. It was conquered by the Siamese, and incorporated in their dominions as recently as 1828, when the king and many of his subjects were brought captive to Bangkok, and the former suffered death in the most inhuman manner.

For the map of the lower portion of the Menam and other Siamese rivers, I am indebted to the kindness of Dr. S. R. House, who allowed me to inspect the surveys and observations drawn up during the course of the repeated excursions which he and

his missionary colleagues of the United States are in the habit of taking into the interior. These journeys are always made in boats, the rivers and canals being the common, and, in most parts of the country, the only highways which Siam possesses. The method resorted to was, to note the course by compass at every turn of the river or canal they traversed. The length of time taken to pass over each course was then marked by the watch, and the rate of going ascertained by a sounding lead, used as a log-line, and thrown overboard whenever it was judged that the rate was changed. The observations thus taken were most numerous and minute. Much of the ground has been gone over more than once by different persons; their respective observations have been compared, and, in working them into the map, the results have been found to agree with very tolerable accuracy with those few positions which have been laid down by astronomical observations.*

It is probable that this map contains all the authenticated geographical information we possess on that most important part of the Siamese dominions, the great valley of the Menam. It is constructed on the scale of two miles to an inch, and embraces very nearly two degrees of latitude and longitude, the town of Petchaburi being (by observation) in lat. $13^{\circ} 5'$, and Lopburi in lat. $14^{\circ} 48'$, while the point at which the survey terminates is 12 or 14 m. to the north of the latter town. Allowing for the windings of the main stream and its tributaries, the map delineates with considerable accuracy nearly 400 m. of this comparatively unknown river. It defines also, for a considerable distance in each case, the courses of the other three rivers that water this great valley, viz., the Bangpakong, for about 100 m.; the Tachin, for 70 m.; and the Meklong, for about 60 m. Several of the principal canals, which spread like a net-work over the country, and connect these rivers at many points, are also delineated. These are far too numerous to be given in detail; and during the rains, when the whole country is inundated, it is not even necessary for the boats to confine themselves to the canals, as they can be pulled or poled across the country in almost every direction.

The travels of Bishop Pallegoix have extended farther into the interior than those of the American missionaries; but he does not inform us whether he has embodied his experience in a survey, nor does he, as far as I am informed, define by latitude and longitude the position of any of the places which he visited. From his narrative, it appears that he penetrated above the town of Phitsalok to the borders of the Lao country, or about 300 m. to the north and north-east of Muang Phrom, the farthest point to which this

* A tracing of the original was presented to the Society by the Author of this Paper.

survey extends. He explored the Meklong to Pakphrek, believed to be about 120 m. from its mouth; he ascended the Tachin as far as Supanburi, which he considers to be 180 m. from the sea, though the position on his map could not make the distance greater than that of Pakphrek. On the right branch of the Menam he reached Pakprian, about 30 m. beyond the point where this survey terminates, and he travelled on the Bangpakong, as far as Khorayok, which he states to be two days' journey, or perhaps little less than 100 m. beyond Petriu. The fertile or cultivated districts, however, appear, in few cases, to extend far beyond the limits of this survey; and within this space, rich crops of rice, indigo, maize, fruits, and vegetables, in great variety, with sugar, cotton, pepper, and other spices, gums, &c., render ample returns to the industry of the people, wherever it has been applied. On the other hand, the wildest and most complete desolation appears to reign throughout the vaster and more remote tracts, which, according to Bishop Pallegoix, are tenanted almost solely by beasts of prey.

This survey supplies the positions of the two principal cities of the country—Bangkok, the present metropolis, and Ayuthia, the ancient capital. It also embraces 14 other towns, the population of which varies from 2000 to 10,000, and 150 villages, numbering sometimes 20 or 30, at others 200 or 300 inhabitants. The houses of the mass of the people are constructed of teak-wood and atap, very neatly put together, and sometimes attaining even lofty dimensions; but the temples and their attendant pagodas form the chief architectural feature of towns and villages, and their number sufficiently attests the deep attachment of the people to Buddhism, the universal religion of the land. The sites of 305 of these temples—most of which are of large size, supporting from 50 to 100 priests in each—are marked in the survey; but this number would be considerably more than doubled if it included the sanctuaries of the towns, as more than 100 are to be found in Bangkok alone.

In the old accounts of Siam, given by the early Portuguese and French writers, two capitals are constantly spoken of, and severally called "Lonvo" and "Siam." The first is a corruption of the Siamese name Lopburi, and the latter is Yuthia, or Ayuttaya,* the foreigners of those days having employed the name of the nation to designate what was then its principal metropolis. The Burmese wars of 1760 and 1766, and the removal of the seat of government from Bangkok to Phiatak, a few years later, led to the rapid decay both of Ayuttaya and Lopburi; but the ruins of both cities prove

* Yuthia, Ayuthia, Sanskrit Ayudya, Hindie Udih, and in English Oude, the recently annexed Indian kingdom; in Hindu mythology the kingdom of the demigod Rama, the hero of the epic poem of the Ramayana.

their former extent, and contain objects of considerable interest. At Lopburi, among the wreck of Pagan temples, may also be seen the columns and other remains of the Christian Church, built by Constantine Phaulcon, the celebrated Greek adventurer, in about the year 1683, when he, who had been captain's steward of an English East Indiaman, possessed all the dignity and power of first Minister of the Crown. One of the capitals of these columns, carved in wood after a Corinthian pattern, was presented to Sir John Bowring, at Bangkok. The situation of Lopburi is much higher than the surrounding country, and was the favourite resort of the former kings during the rainy seasons, when other places were more or less affected by the periodical inundations of the Menam.

The ruins of Ayuthia are said to cover the whole of the island formed by the circuitous course of the river at this position. The island was evidently at one time encircled by a wall, and the river then served as a natural and formidable moat. Colossal idols, constructed principally of brick, which owe their preservation to a thick coating of metal, are found standing among the débris of the temples to which they once belonged. If the annals of Siam are to be believed, 25,000 lbs. of copper, 2000 lbs. of silver, and 400 lbs. of gold, were used in the casting of one of these images. The city walls have fallen down, and large trees, tenanted by vultures and owls, are growing out of their ruined heaps. A new town has been formed on the bank of the river, opposite the old site, having a population estimated at 40,000 inhabitants, many of whom reside in floating houses, similar to those of Bangkok.

The latitudes of Lopburi and Ayuthia have been observed by Captain Davis, an experienced navigator, who accompanied the present king on an expedition to both these places, and took observations by his Majesty's orders. He places Lopburi in $14^{\circ} 48' \text{ N.}$, and Ayuthia in $14^{\circ} 20' 40'' \text{ N.}$

Bangkok calls for our chief notice. It is a very remarkable city, if viewed only in relation to its immense population; on which subject, however, it must be admitted there is room for a diversity of opinion. The Roman Catholic missionaries, who have resided there for many years, insist upon an estimate of 400,000 inhabitants, and the calculations of the American missionaries give no less a number than 300,000 or 350,000. From my own observation I imagine that the Chinese and their descendants number one-third of the whole population, and colonies of Burmese, Peguans, Cambojans, Cochin-Chinese, Malays, Arabs, and Indo-Portuguese, are located at different points in the suburbs. Some idea of the population may be formed from the space covered by the city and suburbs, which extend along both banks of the river

for fully 7 m. Their breadth is more difficult to estimate ; but at more than one point it is equal to the length named. The city, or rather that part of it which is enclosed within the walls, lies on the left bank of the river. The walls are about 30 ft. in height, and 10 or 12 in thickness. The palaces of the first and second kings are situated within the walls ; but most of the nobles reside without, and the temples adorn the suburbs as thickly as the city. A good view of the city and surrounding country, can only be obtained by ascending the spire of some lofty pagoda. The spectator then sees to great advantage a very striking picture, prominent in which appear the roofs of the numerous temples, which are covered with coloured tiles, and profusely gilded. Then we have the tall spires of numerous pagodas, shooting up to the height of 150 and 200 ft. ; the palaces of the two kings and of numerous nobles, fantastically ornamented, and the scarcely less picturesque houses of the people, sheltered, enlivened, and frequently hid from view by bright green foliage, principally that of fruit-trees, which are thickly interspersed in every direction. The Menam, winding through the centre of this scene, adds greatly to its beauty and its animation. Boats of all sizes are constantly flitting to and fro upon its surface, and the whole commerce of the place is transacted in the floating houses, which, moored in tiers along its banks, and extending for some distance into the stream, give to Bangkok the appearance of a city on the waters.

VIII.—*Explorations into the Interior of Africa.* By DR. DAVID LIVINGSTON, LL.D., etc. (*Gold Medallist.*)

(Continued from Vol. XXV.)

Communicated by Sir R. I. MURCHISON.

Read, March 10, 1856.

1. *Dr. Livingston's Astronomical Observations for Geographical Positions on his journey from the Leeba to Angola, and in Angola on his return : between January 1, 1854, and January 11, 1855 : with calculation of the Longitudes and Latitudes therefrom, effected at the Royal Observatory, Cape of Good Hope, by T. MACLEAR, H.M. Astronomer at the Cape of Good Hope.*

Royal Observatory, Cape of Good Hope,
29th Dec., 1855.

SIR,—The last letter I received from my friend Dr. Livingston is dated at Cassangé, Angola, January 29, 1855. He says, “I am now on my way back to the Zambesi, and thence I hope to descend to Quilimane on the east coast. It is rather a difficult task, for I